CW#122: Perpendicular Lines

Geometry

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

Review:

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| Perpendicular Lines:  What do we already know? | |
| Write the opposite reciprocal of each number: | |
| * 3 * -3 * 2 * -1 | * 2/3 * -4/6 * -1 * -2 |

Pratice:

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| 1. Which equation would be perpendicular to y = 7x + 1?   A) y = -7x + 1  B) y = 1/7x  C) y = -1/7x + 1  D) y = 7x | 1. Which equation would be perpendicular to y = ¼ x +1?   A) y = 4x + 2  B) y = -4x  C) y = - ¼ x  D) y = ¼ x + 1 |
| 1. What is the slope of a line that is   perpendicular to: 6x + 2y = 12?  \*(HINT: convert it to slope-intercept form first!)\*  A) m = -3  B) m = -1/3  C) m = 1/3  D) m = 2 | 1. Which line is perpendicular to: 5x + 3y = 15?   \*HINT: convert to slope-intercept form when needed\*  A)  B)  C)  D) |
| 1. Write the equation of a line below that that will be perpendicular to: y = 6x – 3  * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1. Prove that the line you created is   perpendicular by graphing both  lines on the coordinate grid below.  **http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png** | 1. Write the equation of a line below   that that will be perpendicular  to: 2x + 4y = 8   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1. Prove that the line you created is   perpendicular by graphing both lines  on the coordinate grid below.  **http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png** |

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| Write the equation of the line that is parallel to the given line and passes through the given point. Your final answer should be in slope-intercept form. | |
| 9. y = 2x + 5; (-1, -1)  http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png | http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png10. 9x + 3y = 8; (-1, -4) |
| 11. y = -4x + 2; (-2, 5)  http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png | http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png12. y = x + 5; (3, 2) |
| http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png13. 3x – y = 5; (0, -7) | 14. y = 4x; (4, 4)  http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png |
| http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png15. A parallelogram has three sides at , , and . Give a possible equation for the fourth side. Explain. | http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png16. A quadrilateral has vertices at A(-2,-2), B(2,0), C(0,2), and D(0,-4). Is this a parallelogram? Why or why not? |

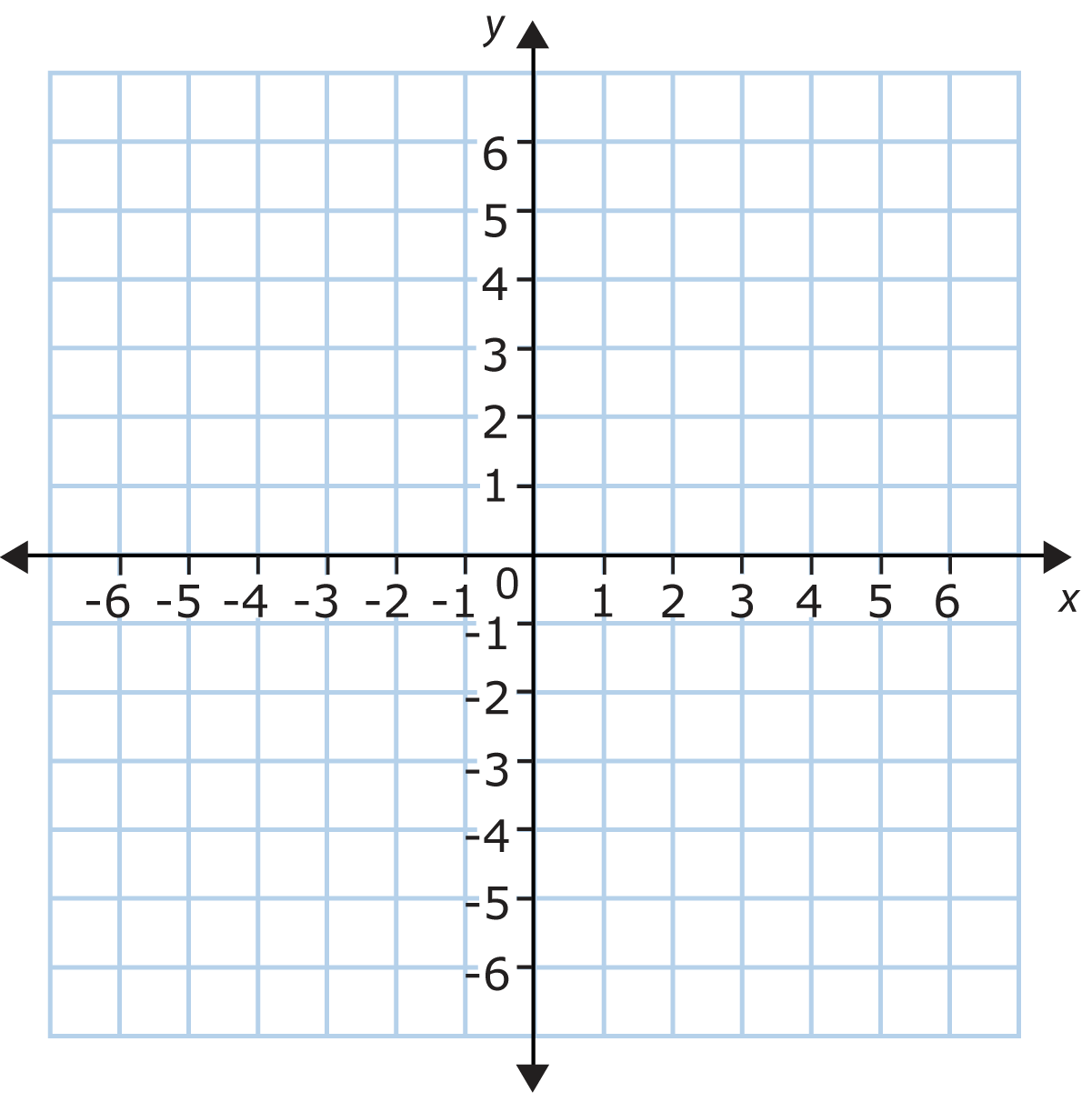
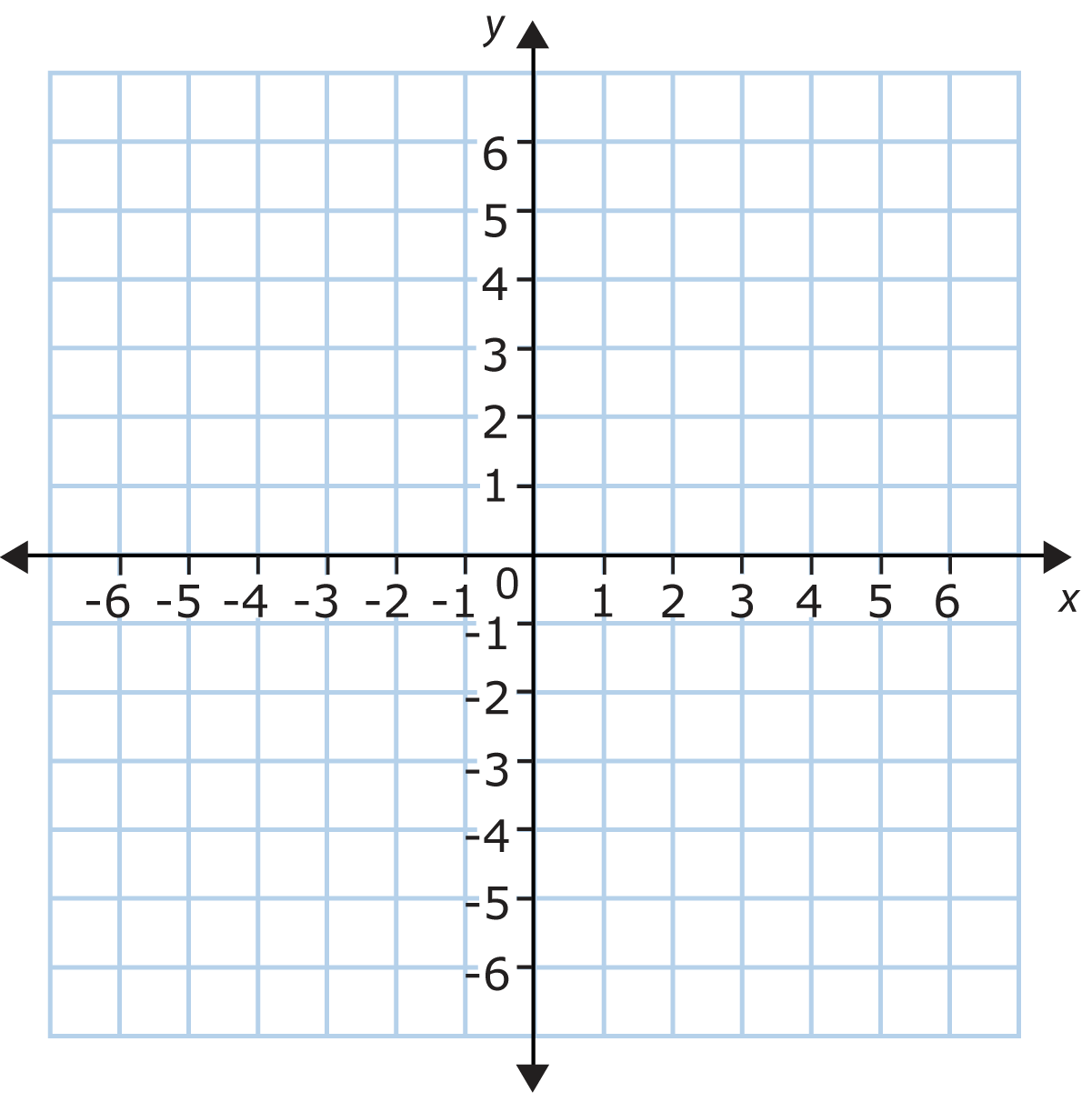
HW#121: Parallel Lines

Geometry

Due: Tuesday, May 10th, 2016

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

Failure to show work will result in a LaSalle.



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| Write the equation of the line that is perpendicular to the given line and passes through the given point. Be sure that your final answer is in slope-intercept form. | |
| 1. y = x + 5; (-1, -1) | 1. y = -3x + 1; (6, 4) |
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We will be using the following problem tomorrow in class. Please be sure to follow the color directions!



